

In the Claims:

1. (currently amended) A bipolar transistor (HBT) comprising:
a collector including a frustum-shaped collector pedestal having an at least substantially planar upper surface, a lower surface, and a slanted sidewall extending between said upper surface and said lower surface, wherein said upper surface has an area substantially less than an area of said lower surface;
an intrinsic base overlying all of said area of said upper surface of said collector pedestal;
an emitter overlying said intrinsic base; and
a raised extrinsic base conductively connected to said intrinsic base; and
a dielectric region extending along said slanted sidewall of said collector pedestal adjacent to said upper surface.
2. (canceled)
3. (original) A bipolar transistor as claimed in claim 1 wherein said collector pedestal is formed by epitaxial growth on top of a single crystal semiconductor layer.
4. (original) A bipolar transistor as claimed in claim 1 wherein said collector pedestal is formed by etching a single-crystal semiconductor layer.

5. (currently amended) A bipolar transistor as claimed in claim 2, further comprising a shallow trench isolation, wherein said dielectric region includes a layer of silicon nitride extending between said a-shallow trench isolation and said slanted sidewall of said collector pedestal.
6. (original) A bipolar transistor as claimed in claim 5 further comprising a dielectric spacer, wherein said raised extrinsic base is self-aligned to said emitter and spaced from said emitter by said dielectric spacer.
7. (original) A bipolar transistor as claimed in claim 1 wherein said emitter is self-aligned to said collector pedestal.
8. (original) A bipolar transistor as claimed in claim 7 wherein a centerline of said emitter is aligned to a centerline of said collector pedestal.
9. (currently amended) A bipolar transistor as claimed in claim 8 wherein said emitter and said collector pedestal are aligned within a single formed in a photolithographically patterned opening in a layered stack of materials.
10. (original) A bipolar transistor as claimed in claim 1 wherein said intrinsic

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Hiroyuki Akatsu et al.

base includes a layer of a single-crystal semiconductor which forms a heterojunction with at least one of said emitter and said collector pedestal.

11-20. (canceled)